REMARKS:

Claims 1 and 7 through 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Richards No. 6,388,661. The Examiner acknowledges that Richards does not expressly detail that the controller provides an interrupt or scanning the pixel memory using an interrupt to control the scanning to provide scanned data to the display in a color field sequential mode. The Examiner states, however, that it would have been obvious to recognize that the device of Richards teaches a field sequential color system that includes an array of memory cells coupled to an array of pixel elements.

What the Examiner does not acknowledge is that in Richards a framer buffer of 310, as described in col. 3, is used to convert the incoming pixel data to a bit plane format. The arrangement of Richards is acknowledged in Paragraph 6 of this application. It is one of the objects of this invention to eliminate the need for a frame buffer. The Examiner's argument that blanking is somehow equivalent to interrupting is not supported by any disclosure in Richards and the Examiner provides no separate basis for it.

Moreover, the blanking to which the Examiner refers, as described at col. 7, lines 11 et seq. is not used to control the scanning of the pixel memory, but to blank all the pixel elements of the display for an interval having a pre-determined duration. Thus, the blanking of Richards controls the display not the scanning.

The invention provides a significant advantage over Richards. By eliminating the frame buffer, the size and cost of the display can be reduced. Since it is one object of color field sequential displays in general to reduce the size and cost of the display, the elimination of a frame buffer is a desirable goal. If Richards' blanking signal were equivalent to Applicant's interrupt for controlling of the scanning of the pixel memory, then Richards would have eliminated the frame buffer. The fact that he does not do so is because the blanking controls the display, not the scanning and there is no suggestion in the art that any arrangement of the blanking could be used to eliminate the frame buffer.

As to Claims 5, 6, 12 and 13, the Examiner relies on Richards in view of Comerford No. 4,592,057.

Comerford is in no way related either to Richards or to Applicant's invention. Comerford describes apparatus for controlling the drive current for a light emitting semiconductor device of the type used in injection lasers. There is nothing in Comerford that relates in any way to displays of any sort, let alone to color field sequential displays. Rather, as Comerford puts it, the prior art circuits [for controlling the bias level of an injection laser] are inherently difficult to monolithically integrate since they include circuit elements such as capacitors and inductors, which are inherently difficult to integrate. An object of Comerford is to provide a bias current control circuit for an injection laser, which can be readily integrated monolithically. Applicant finds nothing in Comerford or in Richards that would suggest using the digital to analog converter of Comerford in Richards' display. Comerford does not relate to displays and Richards does not relate to injection lasers. Richards doesn't even use a light emitting semiconductor devices in his display, but rather uses spatial light modulators which use micro mirrors to achieve greater brightness than LCD based projectors with the same light source. While colored LEDs could be used as a light source in Richards, the LEDs are not modulated to form the image, rather as described at col. 2, line 33, the LEDs may simply be switched on and off as desired.

It is axiomatic that the suggestion to combine two references must come from the prior art, either from the references themselves or from some other source. In this case, nothing in the references supports the combination and the Examiner has not suggested any other source for the suggestion.

In summary, Richards is an example of the prior art over which the present invention is an improvement. This invention allows for the elimination of the frame buffer shown in each of the embodiments of Richards (figs. 2a, b and c) to reduce the size and cost of the display. There is no suggestion in Richards to use an interrupt to control scanning, the blanking signal the Examiner refers to being used to blank the display. Comerford adds nothing of relevance to Richards and no suggestion for making the proposed combination is offered. Accordingly, Applicant respectfully submits that the rejection is not appropriate and should be reconsidered and upon reconsideration withdrawn and the application passed on to issue.

Respectfully submitted,

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Enclosure: Figure 5 (marked in red)

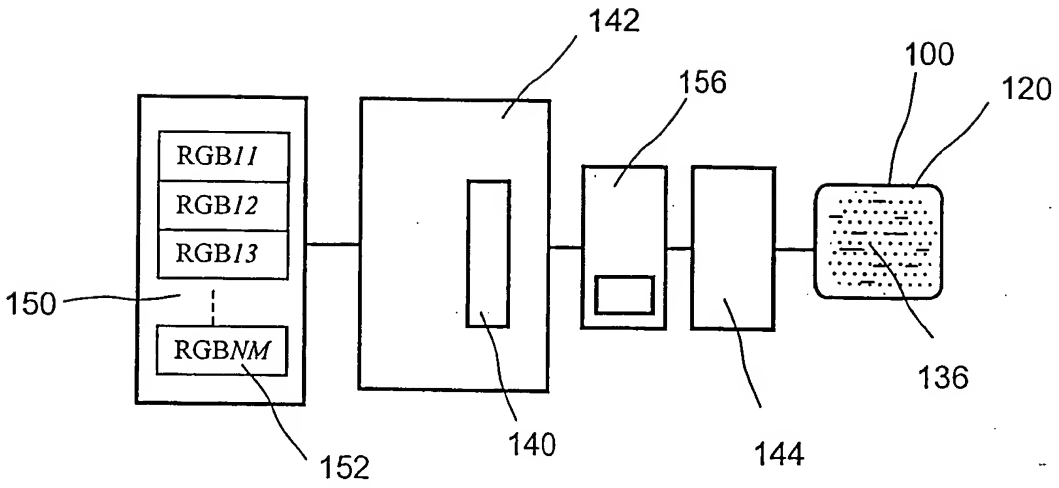

Fig. 4

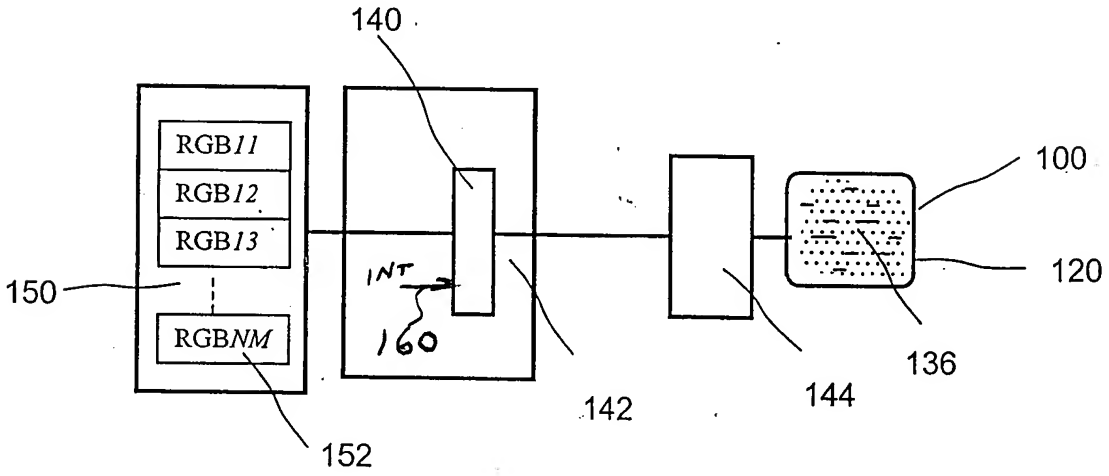

Fig. 5